The Healthy Diabetes Plate

The Situation
In Idaho and the U.S., diabetes is the seventh leading cause of death. Approximately 50,000 adult Idahoans have been diagnosed with diabetes, and approximately 25,000 are not yet diagnosed. Therefore, an estimated 75,000 Idahoans or 5.4% of the population have diabetes.

Individuals who do not follow a prescribed treatment for diabetes are more likely to suffer from heart disease, a stroke, high blood pressure, blindness, kidney disease, nervous system damage, amputations, and dental disease. The total annual cost in diabetes in Idaho, including direct medical expenses and indirect costs, such as disability, work loss and premature mortality is estimated at $338 million.

The Behavior Risk Factor Surveillance System (BRFSS) conducted through the Centers for Disease Control and Prevention (CDC) found that Idaho adults with diabetes are more likely to: be overweight, have high blood pressure, high blood cholesterol levels, be sedentary, and less likely to eat fruits and vegetables.

The Idaho Plate Method (IPM) uses a plate to visually teach people with diabetes what foods they should be eating. In the IPM, half of the plate is covered with vegetables; ¼ of their plate is covered with a bread/starch or grain food, and the remaining ¼ of their plate is covered with a meat/protein food. In addition, a serving of fruit and dairy is allowed at each meal.

Our Response
Inputs. A four-part curriculum was curriculum, originally called Diabetes in Idaho, which focuses around the Idaho Plate Method was developed by Martha Raidl, Extension Nutrition Education Specialist. The Idaho Plate Method (IPM) uses a plate to visually teach people with diabetes what foods they should be eating. In the IPM, half of the plate is covered with vegetables; ¼ of their plate is covered with a bread/starch or grain food, and the remaining ¼ of their plate is covered with a meat/protein food. In addition, a serving of fruit and dairy is allowed at each meal.

This curriculum was piloted by Extension Educators in Idaho, Oregon, and Colorado, and reviewed by two Certified Diabetes Educators for technical accuracy, Mimi Hartman, Director of the Diabetes Control Program in the Idaho Department of Health and Welfare, and Julie Harker, one of the original developers of the Idaho Plate Method. The revised curriculum was renamed “The Healthy Diabetes Plate.”

Outputs: Participants were visually taught how to use a “plate” to: (1) modify current food intake, (2) plan meals using a variety of foods, (3) incorporate recipes, and (4) eat out in restaurants.
The pre and post surveys were revised and piloted to determine whether or not participants took part in various diabetes self-care measures and changed their eating habits after completing these classes.

**Program Outcomes**

Approximately 70 people with diabetes completed the revised pre and post surveys. Preliminary results showed a majority of participants participated in five diabetes self-care measures and there were changes in eating grain, fruit, vegetable, and milk consumption. The specific results are shown below.

**Diabetes self-care measures.** The survey results indicate that:
- 95% of participants had a flu shot
- 86% checked blood sugar levels and had an eye exam.
- 71% had a foot exam
- 60% had a hemoglobin A1C test within the last year.

**Changes in eating behaviors.** Participants increased their consumption of:
- whole grain breads by 11%
- high fiber cereals by 29%
- fruits by 19%
- vegetables by 10%
- milk by 4%

**Future plans**
- Promote the curriculum to health care professionals that deliver diabetes education.
- Conduct a state-wide evaluation of the curriculum.
- Disseminate the information from the preliminary study at the International Education Conference in January 2003 and at the CDC Diabetes Conference in March 2003.

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**For More Information**

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12-02raidl-fcs-diabetes.doc
December 2002